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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,162	10/14/2004	Helmut Winterling	53429	9022
26474	7590	08/31/2006		
NOVAK DRUCE DELUCA & QUIGG, LLP 1300 EYE STREET NW SUITE 400 EAST TOWER WASHINGTON, DC 20005				
			EXAMINER ZEMEL, IRINA SOPJIA	
			ART UNIT 1711	PAPER NUMBER

DATE MAILED: 08/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Tx

<b>Office Action Summary</b>	<b>Application No.</b> 10/511,162	<b>Applicant(s)</b> WINTERLING ET AL.	
	<b>Examiner</b> Irina S. Zemel	<b>Art Unit</b> 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mohrschladt et al USP 6,316,588 or Mohrschladt et al (USP 6,288,207).

As discussed in the previous office action, Mohrschladt et al USP 6,316,588 discloses a continuous process for preparing a polyamide by reacting at least one aminonitrile with water in the presence of a catalyst which is a titanium dioxide catalyst that anticipates the claimed invention. See abstract; cols. 1- 15, the examples and claims 1-8.

As also discussed in the previous office action, Mohrschladt et al (USP 6,288,207) discloses a continuous process for producing a polyamide by reacting at least one aminonitrile with water comprising reacting the aminonitrile and water in the presence of a catalyst selected from titanium dioxide packing elements, etc. See abstract; cols. 1-13, the examples and claims 1-9.

The reference specifically exemplified the titanium catalyst with BET surface area of preferably greater than 40 m<sup>2</sup>/g, however both references expressly teach that catalysts with lower BET may be used, but in that case the volume of the catalyst bed should be increased to maintain the appropriate catalytic activity. See specifically '588,

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column 6, line 67 to column 7, line 4 and '207, column 5, lines 12-14. Therefore, use of catalysts with lower than 40 m<sup>2</sup>/g BET surface area are within the purview of the references (although it is not disclosed as the preferred embodiments), and use of catalyst with BET surface area of 35 m<sup>2</sup>/g as claimed in the instant invention, which is only slightly lower than the disclosed preferred embodiment of 40 m<sup>2</sup>/g, would have been obvious in processes where the catalytic activity is not critical or using higher bed volume as expressly taught by the reference. Also it maybe used as catalyst with lower BET surface area are generally less costly.

Therefore, in the absence of showing of unexpected results that re fully commensurate in scope with the claimed invention and can be clearly attributed to the titanium dioxide catalyst surface area, the invention as claimed would have been obvious from the disclosure of each of the cited references as discussed above.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

The outstanding rejection is issued under the provisions of 35 USC 103, rather than previous anticipation rejection. Thus, the applicants arguments regarding anticipations of each and every element is moot. However, the examiner will reply to the arguments insofar as the arguments still are relevant to the newly issued obviousness rejection.

The applicants argue that the references do not expressly disclose the claimed catalyst with the claimed BET syface area of blow 35 m<sup>2</sup>/g. The examiner agrees that

the references do not expressly disclose the specifically claimed surface area catalysts, however, as per discussion above, use of such catalyst is within purview of the reference and would have been obvious with reasonable expectation of adequate results as per expressed teachings of both references.

The applicants further argue that the object of the present invention is to provide a process in which the reduction of catalytic activity of titanium catalyst does not occur by using catalyst with lower BET surface area. While some general discussion to that effect is found in the specification, there is absolutely not a single evidence on the record that, in fact, the catalytic activity of the claimed catalyst is the same as the catalyst expressly disclosed in the reference. The applicants further state that the applicants found that the process according to the present invention produces polymer with lower titanium content. First, the result does not appear to be unexpected as the smaller particles tend to incorporate in polymer at greater rate. But even if, *arguendo*, such result is unexpected, the showing of unexpected results is not commensurate in scope with the claimed invention. The lower expressly disclosed BET surface area is 40 m<sup>2</sup>/g (even in examples it is 46) and not 50 as used in comparative examples of the instant application, and also it is compared to the catalyst having lower than the upper claimed limit BET surface area, i.e. 30, not 35 m<sup>2</sup>/g.

Thus, the showing of alleged unexpected results is not commensurate in scope with the claimed invention.

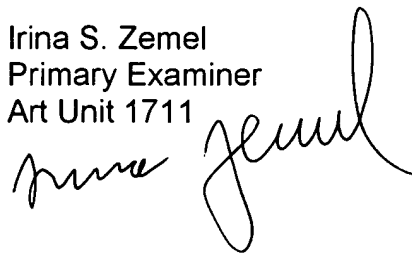
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irina S. Zemel whose telephone number is (571)272-0577. The examiner can normally be reached on Monday-Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571)272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ISZ

Irina S. Zemel  
Primary Examiner  
Art Unit 1711

A handwritten signature in black ink, appearing to read 'Irina S. Zemel', is written over the printed name and title.